

Claims

- [c1] 1. A method for treatment of a cancer characterized by elevated expression of hsp27 as compared to non-cancerous tissue of the same type in an individual suffering from the cancer, comprising the step of administering to the individual a therapeutic composition effective to reduce the amount of active hsp27 in the cancer cells.
- [c2] 2. The method of claim 1, wherein the therapeutic composition comprises an antisense oligonucleotide that is sequence specific for hsp27.
- [c3] 3. The method of claim 2, wherein the antisense oligonucleotide has backbone modifications to provide resistance against nuclease digestion *in vivo*.
- [c4] 4. The method of claim 2, wherein the antisense oligonucleotide has a length of from 12 to 35 nucleotides.
- [c5] 5. The method of claim 4, wherein the antisense oligonucleotide comprises a consecutive series of bases as set forth in any of Seq. ID No. 1-81.
- [c6] 6. The method of claim 4, wherein the antisense oligonucleotide comprises a consecutive series of bases as set forth in Seq. ID No. 82.
- [c7] 7. The method of claim 1, wherein the therapeutic composition

comprises an siRNA that is sequence specific for hsp27.

- [c8] 8. The method of claim 7, wherein the siRNA has backbone modifications to provide resistance against nuclease digestion *in vivo*.
- [c9] 9. The method of claim 7, wherein the siRNA has a length of from 16 to 49 nucleotides.
- [c10] 10. The method of claim 9, wherein the siRNA comprises a consecutive series of bases as set forth in any of Seq. ID No. 83-90.
- [c11] 11. The method of claim 9, wherein the siRNA comprises a consecutive series of bases as set forth in Seq. ID No. 84.
- [c12] 12. The method of claim 1, wherein the cancer is prostate cancer.
- [c13] 13. The method of claim 1, wherein the cancer is bladder cancer.
- [c14] 14. A pharmaceutical composition comprising a therapeutic agent effective to reduce the amount of active hsp27 in cancerous cells exposed to the therapeutic agent, and a pharmaceutically acceptable carrier.
- [c15] 15. The composition of claim 14, wherein the therapeutic composition comprises an antisense oligonucleotide that is sequence specific for hsp27.
- [c16] 16. The composition of claim 15, wherein the antisense oligonucleotide has backbone modifications to provide resistance against nuclease digestion *in vivo*.

- [c17] 17. The composition of claim 15, wherein the antisense oligonucleotide has a length of from 12 to 35 nucleotides.
- [c18] 18. The composition of claim 17, wherein the antisense oligonucleotide comprises a consecutive series of bases as set forth in any of Seq. ID No. 1-81.
- [c19] 19. The composition of claim 17, wherein the antisense oligonucleotide comprises a consecutive series of bases as set forth in Seq. ID No. 82.
- [c20] 20. The composition of claim 14, wherein the therapeutic composition comprises an siRNA that is sequence specific for hsp27.
- [c21] 21. The composition of claim 20, wherein the siRNA has backbone modifications to provide resistance against nuclease digestion *in vivo*.
- [c22] 22. The composition of claim 21, wherein the siRNA has a length of from 16 to 49 nucleotides.
- [c23] 23. The composition of claim 22, wherein the siRNA comprises a consecutive series of bases as set forth in any of Seq. ID No. 83-90.
- [c24] 24. The composition of claim 22, wherein the siRNA comprises a consecutive series of bases as set forth in Seq. ID No. 84.